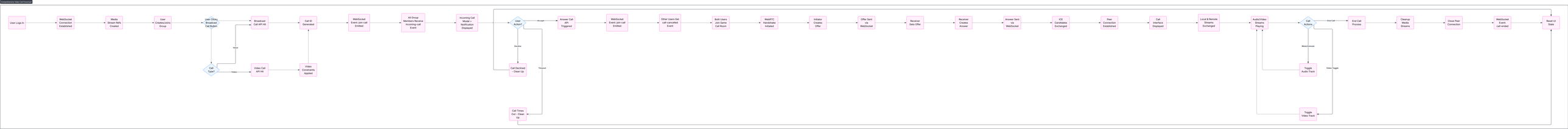
Comprehensive Video Call Flowchart
User Logs In
WebSocket Connection Established
Media Stream Refs Created
User Creates/Joins Group
User Clicks Broadcast Call Button
Broadcast Call API Hit
Call Type?
Voice
Video
Video Call API Hit
Call ID Generated
Video Constraints Applied
WebSocket Event: join-call Emitted
All Group Members Receive incoming-call Event
Incoming Call Modal / Notification Displayed
User Action?
Accept
Decline
Timeout
Answer Call API Triggered
Call Declined - Clean Up
Call Times Out - Clean Up
WebSocket Event: join-call Emitted
Other Users Get call-cancelled Event
Both Users Join Same Call Room
WebRTC Handshake Initiated
Initiator Creates Offer
Offer Sent via WebSocket
Receiver Gets Offer
Receiver Creates Answer
Answer Sent via WebSocket
ICE Candidates Exchanged
Peer Connection Established
Call Interface Displayed
Local & Remote Streams Exchanged
Audio/Video Streams Playing
Call Active?
End Call
Mute/Unmute
Video Toggle
Toggle Audio Track
Toggle Video Track
End Call Process
Cleanup Media Streams
Close Peer Connection
WebSocket Event: call-ended
Reset UI State